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EXAMINER	
BHATIA, AJAY M	

ART UNIT	PAPER NUMBER
2145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/077,039	LIN ET AL.	
	Examiner	Art Unit	
	Ajay M Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelvin et al. (U.S. Patent 6,859,831, referred to as Gelvin) in view of Barber at al. (U.S. Patent 6,744,771, referred to as Barber) in further view of Steger et al. (U.S. Patent 6,411,987, referred to as Steger).

For claim 1, Gelvin teaches, a implement remote data acquisition and processing method, comprising the steps of:

(a) creating a data link between the system administrator and the central device through an appropriate communication media, wherein the data link creation follows the defined administrator-server communication mechanism; (see Gelvin, Col. 11 lines 32-48, Col. 23 line 63 to Col. 24 line 21, user is system administrator by his ability to his ability to adjust node interaction with network)

(b) creating a data link between individual devices (instruments and facilities) and the central device server, wherein the data link creation follows the defined device-server communication mechanism; (see Gelvin, Col. 32 lines 32-54, Col. 23 line 63 to Col. 24 line 21)

(c) creating a data link between devices (instruments and facilities) via the central device server where information exchange is needed, wherein the data link creation follows the defined device-device communication mechanism; (see Gelvin, Col. 12 lines 46-58, Col. 23 line 63 to Col. 24 line 21)

(d) receiving data by the central device server data from both communicating parties, and forwarding the output stream of one device (instrument and facility) to the input stream of the other, and vise versa; (see Gelvin, Col. 32 lines 34-60, Col. 23 line 63 to Col. 24 line 21)

(e) being responsible by the central device server for the flow control of the communication system, including package buffering and management, package recognition and distribution, and communication status monitoring; (see Gelvin, Col. 36 lines 26-42, Col. 69 lines 12-25, Col. 10 lines 33-48, Col. 11 lines 9-22, Col. 22 lines 1-15, a packet is a package)

(f) updating a specific functional module on a specific device (instrument and facility), line retrieves the specific package, and installs the package onto the target device (instrument and facility); (see Gelvin, Col. 11 lines 23-31, Col. 72 lines 19-28)

Gelvin to clearly disclose, the central device server connects to the manufacturer's web site through an appropriate communication media,

Barber teaches, the central device server connects to the manufacturer's web site through an appropriate communication media, (see Barber, Col. 4 lines 34-43)

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to combine the senor communication system of Gelvin with the control communication method of Barber since both are from the same field of invention. (see Gelvin, Col. 6 lines 45-58) and (see Barber, Col. 1 line 44 to Col. 2 line 7)

(g) performing remote data acquisition and processing, a user creates a data link with the central device server through an appropriate communication media and requests data from a specific device (instrument and facility), wherein the central device server redirects the output stream of the device (instrument and facility) to the input stream of the user; (see Gelvin, Col. 12 line 46-58, Col. 38 line 1-10)

(h) performing remote device control and configuration, a user creates a data link with the central device server through an appropriate communication media and requests data from a specific device (instrument and facility), wherein the central device server redirects the output stream of one device (instrument and facility) to the input stream of the user, and vise versa; and (see Gelvin, Col. 18 lines 37-60, Col. 10 line 48 Col. 11 line 8, Col. 23 line 63 to Col. 24 line 21)

(i) converting onboard devices into nodes of information source on the Internet, wherein the central device is connected to the Internet through an appropriate communication media and assigned an IP address. (see Gelvin, Col. 26 lines 26-37)

Gelvin-Barber fails to clearly disclose, different devices (instruments and facilities) are bounded to different port numbers on the central device server, therefore, commercial application on the Internet can access the information provided by these devices (instruments and facilities) by sending a request to the central device server with the specific port numbers.

Steger, different devices (instruments and facilities) are bounded to different port numbers on the central device server, therefore, commercial application on the Internet can access the information provided by these devices (instruments and facilities) by sending a request to the central device server with the specific port numbers. (see Steger, Col. 9 lines 20-37)

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to combine the sensory control system of Gelvin-Barber with the data acquisition of Steger since all three reference are in same field of invention of acquiring data over a network. (see Gelvin, Col. 6 lines 45-58), (see Barber, Col. 1 line 44 to Col. 2 line 7) and (see Steger, Col. 2 lines 39-48)

Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelvin-Barber-Steger as applied to claim 1 above, and further in view of Beer et al. (U.S. Patent 5,864,676, referred to as Beer).

For claim 2, Gelvin-Barber-Steger teaches, the method, as recited in claim 1, wherein the step (a) further comprises the steps of:

(a1) calling the appropriate device driver to communicate with the appropriate communication hardware; (see Gelvin, Col. 12 lines 12-30, API is inherently the calling of the appropriate device drive)

(a2) creating a socket through the selected communication media with the appropriate address and port number; (see Steger, Col. 9 lines 20-37)

(a5) successfully establishing the data link. (see Steger, Col. 9 lines 20-37)

Gelvin-Barber-Steger fails to clearly disclose,

(a3) issuing by the central device server a request to verify the identity of the communication party, for example, a login name and password;

(a4) submitting the personal identification information to the central device server for approval; and

Beer teaches,

(a3) issuing by the central device server a request to verify the identity of the communication party, for example, a login name and password;

(a4) submitting the personal identification information to the central device server for approval; and (see Beer, Col. 3 lines 1-47)

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to combine the data acquisition system of Gelvin-Barber-Steger with the URL login method of Beer as it is well know in the art to implement security and login protection for network and web/internet system. (see Beer, Col. 1 lines 10-45)

For claim 3, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 2, wherein the step (b) further comprises the steps of:

(b1) issuing by the system administrator an instruction to the central device server through an appropriate data link, wherein the instruction contains the type and address of the hardware interface the specific device (instrument and facility);

(b2) calling by the central device server the appropriate device driver to initiate a connection to the specific device (instrument and facility);

(b3) adding by the central device server the specific device (instrument and facility) to its device list when the connection is successfully; and

(b4) establishing the data link successfully.

(see Gelvin, Col. 28 line 21-33, Col. 28 line 60 to Col. 29 line 6, Col. 38 lines 1-10, Col. 12 lines 14-30)

For claim 4, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 3, wherein the step (c) further comprises the steps of:

(c1) issuing by the system administrator an instruction to the central device server through an appropriate data link, wherein the instruction contains the type and

address of the hardware interface the specific devices (instruments and facilities); (see Gelvin, Col. 38 lines 1-10, Col. 28 lines 21-33)

(c2) checking out by the central device server the input stream and output stream of the specific devices (instruments and facilities) from its device list; (see Gelvin, Col. 29 lines 53-65, when device switch between cluster, input stream and output streams are switched between gateways, the queuing message for sending on reconnection, makes a device list and check out inherent)

(c3) redirecting by the central device server the input stream and output stream of the specific devices (instruments and facilities) to each other; and (see Gelvin, Col. 23 line 63 to Col. 24 line 21, Col. 12 lines 46-58)

(c4) establishing the data link successfully. (see Gelvin, Col. 23 line 63 to Col. 24 line 21, Col. 12 lines 46-58)

For claim 5, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 4, wherein the devices (instruments and facilities) support the unique interface:

Java. (see Gelvin, Col. 21 lines 16-26)

For claim 6, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 5, where certain functional module on the devices (instruments and facilities) can be upgraded during runtime. (see Gelvin, Col. 18 lines 9-30, Col. 13 lines 40-45, Col. 37 lines 38-40)

For claim 7, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 6, where the functional module to be upgraded during runtime can be implemented with either C/C++ dynamic linked library or Java class loader. (see Gelvin, Col. 37 lines 50-60)

For claim 8, Gelvin-Barber-Steger-Beer teaches, the method, as recited in claim 7, further comprising the following steps for upgrading a functional module during runtime:

(8.1) issuing by the system administrator an instruction to the central device server through an appropriate data link, wherein the instruction contains name of the device and the functional module to be upgraded; (see Barber, Col. 7 lines 47-64)

(8.2) performing the central device server a query in its database for an instructions to carry out the upgrade; (see Barber, Col. 7 lines 18-27)

(8.3) according to the instructions given by the query result, connecting the central device server to the manufacturer's web site (or other upgrading hosts) through an appropriate communication media; (see Barber, Col. 4 lines 34-43, Col. 14 lines 40-53)

(8.4) according to the instructions given by the query result, retrieving by the central device server the appropriate upgrading package from the manufacturer's web site (or other upgrading hosts); (see Barber, Col. 14 lines 40-53, Col. 7 lines 47-64)

(8.5) sending the central device server and instruction to the specific device (instrument and facility) through the data link to stop the currently running functional

module; (see Barber, Col. 7 lines 18-64, its is obvious that installation of fixing of error will stop the current running functional module)

(8.6) according to the instructions given by the query result, transferring by the central device server the package retrieved from the manufacturer's web site (or other upgrading hosts) to the device (instrument and facility) through the data link and save it at the appropriate place, wherein the operation over-writes the existing functional module on the device (instrument and facility); (see Barber, Col. 14 lines 40-53, Col. 7 lines 47-64, Col. 7 lines 18-27)

(8.7) according to the instructions given by the query result sending by the central device server a command to the device (instrument and facility) through the data link to start the new functional module; and (see Barber, Col. 4 lines 34-43)

(8.8) installing a new functional module successfully. (see Barber, Col. 7 lines, 18-64)

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelvin-Barber-Steger-Beer as applied to claims 2-8 above, and further in view of Kant (U.S. Patent 5,563,874).

For claim 9, Gelvin-Barber-Steger-Beer fails to clearly disclose, the method, as recited in claim 8, wherein the central device server utilizes a message manager to control the information flow.

Kant teaches, the method, as recited in claim 8, wherein the central device server utilizes a message manager to control the information flow. (see Kant, Col. 3 lines 29-47)

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to combine the data acquisition system of Gelvin-Barber-Steger-Beer with the method of Kant since the references are in the same field of invention of. (see Kant, Col. 1 lines 5-28) (see Gelvin, Col. 6 lines 45-58), (see Barber, Col. 1 line 44 to Col. 2 line 7) and (see Steger, Col. 2 lines 39-48)

For claim 10, Gelvin-Barber-Steger-Beer-Kant teaches, the method, as recited in claim 9, wherein message manager follows the following steps in managing the information exchange process:

(10.1) buffering all messages in an array of message queues according to message type (priority);

(10.2) sorting all the message queues according to message type (priority):

(10.3) processing each message queue according to their priority; and

(10.4) processing each message in a message queue in a First In First Out (FIFO) manner. (see Kant, Col. 3 lines 29-47)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US-5,420,981 by Ivie et al.
2. US-5,604,803 by Aziz, Ashar
3. US-6,865,596 by Barber et al.
4. US-5,790,977 by Ezekiel, David
5. US-6,195,690 by Weinreb, Gleen
6. US-6,243,738 by Hayles et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia M Wallace can be reached on (571)-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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